

package encapsulant including an encapsulant material
formed on the first surface of the substrate to enclose
the electronic device, the degating region being formed
outside the package encapsulant, wherein:

the encapsulant material and the degating region
material [contacting the encapsulant] are chosen such
that the adhesive force between the encapsulant
material and the degating region material is less
than the adhesive force between the encapsulant
material and the substrate [material].

2. (AMENDED) A substrate-based packaged electronic
device as in Claim 1, wherein the adhesive force between the
encapsulant material and the degating region material
[contacting the encapsulant] is less than one half the adhesive
force between the encapsulant material and the substrate
[material].

3. (AMENDED) A substrate-based packaged electronic
device as in Claim 1, wherein the adhesive force between the
encapsulant material and the degating region material
[contacting the encapsulant] is approximately 10% of the
adhesive force between the encapsulant material and the
substrate [material].

4. (AMENDED) A substrate-based packaged electronic
device as in Claim 1, wherein the degating region material
[contacting the encapsulant] is gold.

5. (AMENDED) A substrate-based packaged electronic
device as in Claim 4, wherein the encapsulant material is a
thermosetting epoxy resin.

6. (AMENDED) A substrate-based packaged electronic device as in Claim 1, wherein the structure for making external electrical connection further comprises a plurality of solder bumps formed on the second surface of the substrate.

7. (AMENDED) A substrate-based packaged electronic device as in Claim 1, wherein the electronic device is an integrated circuit chip.

8. (AMENDED) A substrate-based packaged electronic device as in Claim 7, wherein the adhesive force between the encapsulant material and the degating region material [contacting the encapsulant] is approximately 10% of the adhesive force between the encapsulant material and the substrate [material].

9. (AMENDED) A substrate-based packaged electronic device as in Claim 7, wherein the degating region material [contacting the encapsulant] is gold.

10. (AMENDED) A substrate-based packaged electronic device as in Claim 1, wherein the substrate is a multilayer substrate, electrically conductive traces and/or regions being formed within the multilayer substrate.

14. (AMENDED) A substrate for use in forming a substrate-based packaged electronic device, wherein:
a surface of the substrate is adapted for mounting an electronic device;
further comprising:
a degating region [is formed] on the surface of the substrate at a location such that the edges of a mold runner of a mold used to encapsulate the electronic device in encapsulant material fit entirely within the degating

region when the substrate is positioned in the mold during encapsulation of the electronic device; and

a degating region material on the degating region,
 the degating region material [is] being chosen such that
 the adhesive force between the encapsulant material and
 the degating region material [that contacts the
 encapsulant] is less than the adhesive force between the
 encapsulant material and the substrate [material].

concrete

15 ~~15~~ (AMENDED) A substrate as in Claim 11, wherein the adhesive force between the encapsulant material and the degating region material [contacting the encapsulant] is approximately 10% of the adhesive force between the encapsulant material and the substrate [material].

16 ~~16~~ (AMENDED) A substrate as in Claim 11 wherein the substrate is one of a plurality of substrates formed in a strip configuration for use in forming a plurality of substrate-based packaged electronic devices[, each of the substrates being formed as in Claim 11].

17 ~~17~~ (AMENDED) A substrate as in Claim 13, wherein the adhesive force between the encapsulant material and the degating region material [contacting the encapsulant] is approximately 10% of the adhesive force between the encapsulant material and the substrate [material].

Please add new Claims 23-25.

18 ~~18~~ ~~--28~~ A substrate-based packaged electronic device as in Claim 1 further comprising excessive encapsulant including the encapsulant material formed on the degating region.

19 ~~19~~ ~~24~~ A substrate-based packaged electronic device as in Claim 1, wherein the degating region material is palladium.

LAW OFFICES OF
 SJERVEN, MORRILL,
 MacPIERSON, FRANKLIN
 & FRIEL
 25 METRO DRIVE
 SUITE 200
 VAN NUYS, CA 91410
 (808) 451-9281
 FAX (808) 451-7979

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